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HARRINGTON & SMITH, PC 4 RESEARCH DRIVE SHELTON, CT 06484-6212			EXAMINER SEVER, ANDREW T	
			ART UNIT 2851	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/735,053  
Filing Date: December 12, 2003  
Appellant(s): PINGALI ET AL.

\_\_\_\_\_  
David M. O'Neill  
For Appellant

**MAILED**  
JUN 07 2007  
**GROUP 2800**

**SUPPLEMENTAL EXAMINER'S ANSWER**

This is in response to the reply brief filed 3/29/2007 appealing from the Office action mailed 12/29/2005.

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Responsive to the reply brief under 37 CFR 41.41 filed on 3/29/2007, a supplemental Examiner's Answer is set forth below:

Appellant raises two new issues in the reply brief that were not previously addressed in the Examiner's Answer to the Appeal Brief, which was mailed on 1/29/2007, which will be presently addressed.

First appellant argues on page 5 of the reply brief that the examiner should have to answer Appellant's arguments regarding the fact that combining Raskar with Miyamoto would render Miyamoto unsuitable for its intended purpose. The examiner has already answered these arguments on page 14 through 16 of the examiner's answer mailed on 1/29/2007. Namely that Raskar does not modify Miyamoto with regards to at least the limitations of claims 1, 24, 32, 34, 35, 37, and 40; Raskar is only provided with regards to claims 1, 24, 32, 34, 35, 37, and 40 to teach that one of ordinary skill in the art at the time of the invention would recognize that the image projected by the projecting unit of Miyamoto on a curve surface would be distorted. Appellant's statement that on page 5 of the reply brief that the examiner has concluded that he can ignore the inconvenient teachings of Raskar, even though he will later rely on them is simply incorrect. The examiner is not ignoring the inconvenient teachings of Raskar, as Raskar's distortion method, they just do not apply to appellant's claims 1, 24, 32, 34, 35, 37, and 40 since appellant's claims 1, 24, 32, 34, 35, 37, and 40 read on a single projector while Raskar teaches a correction method for a plurality of projectors tiled together which requires additional correction which a single projector does not require. Raskar is only provided for claims 1, 24, 32, 34, 35,

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37, and 40 to provide some concrete evidence in the record in support of the finding that the image projected by the projecting unit (11 of Miyamoto) on a curved object (such as the blimp 1 of Miyamoto) would be inherently distorted without some sort of correction such as projecting on the so called "sweet-spot" (see column 2 line 8 of Raskar). With regards to claim 1, Raskar is provided as required by 37 CFR 1.104(c)(2) and as called for in *Zurko*, 258 F.3d at 1386, 59 USPQ2d at 1697: ("The Board [or examiner] must point to some concrete evidence in the record in support of these findings" to satisfy the substantial evidence test) (as quoted and discussed in the MPEP section 2144.03 [R-1] part C.) With regards to claims 29, 30, and 31 Raskar is being used to teach that it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the distortion correction method of Raskar when multiple projectors are used to project on a large curved or irregular shaped surface, this because when multiple projectors are used a further correction is needed then that taught by Miyamoto in view of Connelly due to specific issues of projecting with multiple projectors that are not present when projecting with only one as is minimally required by appellant's claim 1 and similar claims. Accordingly appellant's request that the examiner have to answer Appellant's arguments regarding the fact that combining Raskar with Miyamoto would render Miyamoto unsuitable for its intended purpose should not be granted since the teachings of Raskar are not used to modify Miyamoto with regards to projecting with a single projector, only with multiple projectors which Miyamoto does not address the specific problems associated with projecting with multiple projectors.

Appellant raises a second new issue starting on page 8 of the reply brief: that Connelly addresses a problem different from Appellant's invention and is therefore non-analogous art. Specifically appellant argues that Connelly is directed to (easily) moving a projector or projectors to a projection position where as acknowledged by appellant on page 8 they can project on the "sweet spot" (which as acknowledged by appellant on page 13 of the reply brief result in a image that appears undistorted [to a viewer]). Appellant states on page 8 third full paragraph: "it cannot be said that the movement of the projectors from a storage position to the projection position is performed to correct distortion." However this is contradicted by appellant's own characterization above it in the first and second paragraph of page 8 of the reply brief that the Connelly reference overcomes the problem of the off-axis projectors by moving the projectors to the sweet spot in order to correct for distortion (as viewed by a viewer of the image) that would occur if they were not moved. Accordingly as acknowledged by the appellant in the first and second full paragraphs of page 8 of the reply brief, Connelly is teaching that by moving projectors with translational movement (as opposed to rotational which is taught by Miyamoto), the projector can be moved so that a viewer would see an undistorted image on the surface of the object projected upon. This meets the claimed limitations as set forth in appellant's claims 1, 24, 30, 31, 32, 34, 35, 37, and 40, for example claim 1 claims in part (with inserts explaining where each limitation of the claim is found in the prior art): "wherein the at least one mount is coupled to a mechanism for providing translational movement [taught by Connelly] and rotational movement [taught by Miyamoto] for adjusting one of a position and an orientation of the projection unit to produce from the distorted image [the image is inherently distorted without some sort of correction as evidenced by Raskar] a substantially undistorted image on a surface

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[with the obvious rotation and translational movement of Miyamoto in view of Connelly the image on the surface as taught by Connelly is positioned in the sweet spot resulting in a substantially undistorted image on a surface]. Accordingly appellant's argument that Connelly does not address the claimed problem is incorrect. Connelly specifically (as acknowledged by the appellant) address the claimed problem and for the reasons set forth in the final rejection of independent claims 1, 24, 30, 31, 32, 34, 35, 37, and 40 mailed on 12/29/2005, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Miyamoto by mounting the mounting unit of Miyamoto such that it can have translation movement as taught by Connelly which would result in an undistorted image on the surface greatly enhancing the effectiveness of the projection unit so viewers can enjoy an undistorted image.

For the above reasons and those presented in the Examiner's Answer to the Appeal Brief mailed on 1/29/2007 pages 14-30 it is believed that the rejections should be sustained.

Appellant may file another reply brief in compliance with 37 CFR 41.41 within two months of the date of mailing of this supplemental examiner's answer. Extensions of time under 37 CFR 1.136(a) are not applicable to this two month time period. See 37 CFR 41.43(b)-(c).

A Technology Center Director or designee has approved this supplemental examiner's answer by signing below:

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Respectfully submitted,

Andrew Sever

A handwritten signature in black ink, appearing to be 'AS', followed by a long horizontal line extending to the right.A handwritten signature in black ink, appearing to be 'DLB', followed by a horizontal line.

David Blum

Diane Lee

A handwritten signature in black ink, appearing to be 'DL', followed by a horizontal line.